



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/750,427	12/31/2003	Frank Fago	L-F/217/273	1785	
7590	09/15/2008		EXAMINER		
WOOD, HERRON & EVANS, L.L.P. 2700 Carew Tower 441 Vine St. Cincinnati, OH 45202		VU, QUYNH-NHU HOANG			
		ART UNIT		PAPER NUMBER	
		3763			
		MAIL DATE		DELIVERY MODE	
		09/15/2008		PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/750,427	FAGO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	QUYNH-NHU H. VU	3763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 14 July 2008.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 9-21,23 and 25-37 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 9-21, 23, 25-37 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____ .

## DETAILED ACTION

### ***Response to Amendment***

Amendment and Request for Continued Examination (RCE) filed on 7/14/08 has been entered.

Claims 1-21, 23, 25-37 are present for examination.

Claims 22 and 24 are cancelled.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 13, 25-27, 36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 13, nowhere in the specification discloses the step of "expelling a portion of contrast media that was acquired from the first contrast container out of the syringe through the fill tube and into the second contrast container.

In claims 25-27 and 36, according to the specification, it states that the syringe is oriented such that a discharge tip of the syringe is positioned above a barrel (see page 13, lines 2-5 of Specification). However, it does not clearly state when the discharge tip tilted above the barrel, such as during the filling, the expelling and the resuming.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to

Art Unit: 3763

a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-21, 23, 28-35 and 37 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Duchon et al. (US 2004/0133165).

Duchon clearly discloses that the retraction of plunger 412 (drawing contrast media into the syringe at a first rate 2ml/sec about 40 ml of media, as noted that the volume of 40 ml is not the maximum of volume, it can be filled up more than 40 ml). At this point, there is some air with liquid contrast media in the syringe. The step of performing remove the substantially all air is inherently and well-known during the filling method, we do not want any air to be injected in to the body. During the step of expelling substantially all air out, at least some of the contrast media is expelled through the fill tube (For example: Figs. 7B). Thereafter, filling the syringe at a second fill rate at faster rate (3 ml/sec) to fill the syringe with the desired fill volume of contrast media to complete the filling procedure (see para [0169]).

Regarding claims 12-14, Duchon further discloses the injector system with automatically refill syringe 441. The inherently step of pausing the filling when the contrast container is substantially empty, because, at this point, there is no contrast media left in the container. The system must be paused to refill the contrast media into the syringe. Duchon further disclose that: in automatic mode, subsequent to completion of an injection. In other words, the step of filling the contrast as described in claim 9 always happening before completion another injection.

Claims 25-27, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duchon et al. (US 2004/0133165) in view of Battiato et al. (US 5,925,022).

Duchon discloses the invention substantially as claimed. Duchon does not disclose the syringe oriented such that a discharge tip of the syringe is positioned above the barrel of the syringe during the filling, the expelling and the resuming.

Battiato discloses a method of filling the contrast media into the syringe including that the syringe is oriented such that a discharge tip of the syringe is positioned above the barrel of the syringe during the filling, expelling and the resuming (see Figs 13A-C, col. 19, line 49-col. 21, line 17).

Art Unit: 3763

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the method of Duchon with a fill region, as taught by Battiato, in order to prevent of accidental injection of air into the subject.

Furthermore, it would have been obvious to a person of ordinary skill in the art to try to located the discharge tip of syringe positioned above the barrel of the syringe during the filling, the expelling and the resuming, to push the air out of the syringe as much as possible, as a person with ordinary skill has good reason to pursue the known options within his or her technical grasp.

***Response to Arguments***

Applicant's arguments with respect to claims 1-21, 23, 25-37 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quynh-Nhu H. Vu whose telephone number is 571-272-3228. The examiner can normally be reached on 6:00 am to 3:00 pm.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nicholas D Lucchesi/  
Supervisory Patent Examiner, Art Unit 3763

Quynh-Nhu H. Vu  
Examiner  
Art Unit 3763